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REMARKS

Claims 1-5 are pending in this application, claims 1 and 3 being the independent claims.

Claims 1-5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 356165104A in view of European Publication number 0100086 ("EP '086"). This rejection is hereby traversed because, as detailed below, the cited references, alone or in combination, do not show or suggest all the elements of the claimed invention. Moreover, even if the references were to show all the elements of the claimed invention, there is no motivation to combine the references in the manner suggested by the Examiner.

The present invention as set forth in claim 1 recites a hermetically sealed, optical fiber assembly. The assembly includes a plurality of optical fibers and a ferrule. The ferrule has a first aperture extending through a first end of the ferrule and a plurality of second apertures extending through a second end of ferrule opposing the first end of the ferrule such that a continuous passage is formed between the first aperture and each of the second apertures. The first aperture, which has a diameter greater than a diameter of the second apertures, is sufficiently large in size to receive the plurality of optical fibers therein. Each of the optical fibers traverses the first aperture and a respective one of the second apertures. An adhesive material secures each of the optical fibers to the first aperture and to the respective one of the second apertures. A solder material bonds each of the optical fibers to an entrance to the respective one of the second apertures.

Japanese Patent No. 356165104A (the "'104A patent") in figure 5 shows a ferrule 19 having fibers 24 that collectively traverse aperture 29 and, after traversing a cavity, individually traverse respective apertures 31. An adhesive 27 is used to secure the fibers 24 within the cavity. However, as the Examiner recognizes, the '104A patent fails to show, in addition to the adhesive that is shown, the claimed *solder material bonding each of the optical fibers to an entrance to said respective one of the second apertures*.

EP '086 relates to a hermetically sealed injection laser package. FIG. 6 of the reference shows the optical fiber tail assembly of the package, which includes fiber 60

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and fiber support tube 61 fitted inside a feed-through tube 13 in a block 10. As seen in FIG. 6, the fiber, which has an uncoated segment 63, extends through the optical fiber tube 13. Tin lead solder 68 is supplied to the clearance between the exterior of the support tube 61 and the bore of the feedthrough tube 13 (see page 9, lines 19-23 of the reference).

On page 3 of the office action, the Examiner states that EP '086 "shows the use of tin lead solder 68 for bonding optical fiber tube 61 to an entrance tube 14." The Examiner concludes then that "Therefore, it would have been obvious to provide a solder material bonding each of the optical fibers to an entrance of a respective one of the second apertures for the Japan' 104 optical fiber assembly in view of the teachings of EP'086."

Applicants agree that EP '086 shows the use of solder 68 for bonding tube 61 to entrance tube 14. However, claim 1 recites the limitation that the solder material bonds each of the *optical fibers* to an entrance to said respective one of the second apertures. In contrast, EP '086 merely shows solder that bonds a bonding tube 61 to the entrance tube 14; the optical fiber 60 itself is not bonded to the entrance tube 14. Accordingly, applicants respectfully submit that EP '086 does not show this claimed feature of the invention.

Even assuming *arguendo* that EP '086 does show the optical fiber 60 bonded to the entrance tube 14, Applicants respectfully submit that the Examiner has provided absolutely no motivation for combining EP '086 with Japan '104, as required by required by MPEP 706.02(j). Japan '086 merely shows a ferrule having multiple fibers. EP '086, at most, shows a single fiber that is soldered to the entrance to the ferrule (and, as noted above, in fact EP '086 does not even show this much). Both references merely demonstrate the prior art that applicants themselves refer to in the background of the invention (see paragraphs 4 and 5 of the application). Applicants' invention is based on the recognition that there is a need for a multifiber ferrule in which each fiber is hermetically sealed to an aperture in the ferrule. Thus, the only source of motivation to combine the references in the manner suggested by the Examiner is the Applicants' own disclosure. Applicants respectfully submit that the Examiner is improperly using the

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teachings of Applicants' own invention to provide a source of motivation to combine the references. Such improper use of hindsight has been repeatedly prohibited by the Federal Circuit, as noted in MPEP 706.02(j) ("The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Only the present invention recognizes the advantage that are achieved by providing an optical fiber assembly in which multiple optical fibers are each hermetically sealed with the use of a solder material.

Accordingly, for at least these reasons, Applicant respectfully submits that the rejection of claims 1-5 under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 356165104A in view of European Publication number 0100086 ("EP '086") should be reconsidered and withdrawn.

Conclusion

In view of the foregoing, it is believed that the application is now in condition for allowance and early passage of this case to issue is respectfully requested. If the Examiner believes there are still unresolved issues, a telephone call to the undersigned would be welcomed.

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Fees

If there are any fees due and owing in respect to this amendment, the Examiner is authorized to charge such fees to deposit account number 50-1047.

Respectfully submitted,

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